

MISCELLANEOUS NOTES.

No. I. A Swarm of Butterflies in Bangkok.

I have read with great interest the note contributed by Mr. F. H. Giles (Phya Indra Montri) to the Supplement (Vol. VIII, No. 2, p. 122) on "A Swarm of Butterflies in Bangkok." The migration consisted entirely of males and females of *Appias albina darada* Feld, the males being in overwhelming preponderance. Migrations of the same butterfly have already been recorded from Siam (Vol. VII, No. 2, p. 93; Vol. VII, No. 3, p. 189). The butterflies passed my house in Hicks' Lane, Sathorn Road in great numbers. They were all flying from east to west in groups of three up to ten; great numbers passing under the eaves of the house. From my verandah I estimated (approximately) that 4,500 individuals had passed, between 3.15 and 4.15 p.m., but this estimation takes no account of the swarms flying beyond my house and garden. The migration then ceased (as far as my observations went) except for hundreds of individuals flying with great speed and, presumably, intent on catching up the main body of the migrants. I cannot agree with Major-General P. L. E. Warming's statement that the butterflies were flying in pairs. As soon as I was aware that a migration was in progress, I sent out three men with nets to catch individuals momentarily resting on trees (*Cassia siamea* Lamarck) in a large open space in front of my house. On account of the height at which the butterflies were flying, they obtained in two hours only nine specimens—8 ♂♂, 1 ♀, thus confirming my estimate of the preponderance of the males.

E. J. GODFREY.

Bangkok, May 1931.

No. II. A New Parasitic Hymenoptera.

(*Apanteles salutifer*, sp. n.)

A new species of Braconidae was discovered in Bangkok in 1929 and again in 1930 from a caterpillar feeding on *Sandoricum indicum* (Katawn). It is described by D. S. Wilkinson in the Bulletin of Entomological Research, Vol. XXII, pt. 1, March 1931, p. 77. The host is a micro-moth that has not yet been identified, but is one of the Tortricidae near *Cacoecia eductana* Walk. The type is deposited in the British Museum.

W. R. S. LADELL.

Bangkok, June 1931.

No. III. A New Moth from Siam.

(*Daseochaeta mckeanae* Cockerell)

Professor T. D. A. Cockerell, in the Bulletin of the Brooklyn Entomological Society, Vol. XXVI, February 1930, describes a new moth, *Daseochaeta mckeanae*, which was collected by Mrs. Laura McKean on Doi Sutep, in April 1929. The author remarks that "this

beautiful species appears to be nearest to the Chinese *D. marmorea* Leech, but distinguished especially by the broad white outline of the reniform stigma. It is also a smaller insect." Besides the technical description, Professor Cockerell gives a critical note on the genera *Daseochaeta*, *Diphthera*, and *Diphtherocoma*.

W. R. S. LADELL.

Bangkok, June 1931.

No. IV. Dispersal of Fruit by Wind.

The following observations are of some interest, as, though it is well known that certain fruit can be carried considerable distances by wind, there are insufficient observations as to how far they actually are carried in nature.

Fruit of *Hopea odorata* (takien) and *Dipterocarpus alatus* (yang). In Chaiyapum Province last February, while camped near a stream along which these trees were growing, a sudden and strong wind-squall came up. Swarms of fruit from both species of tree whirled through the air, crossing a patch of rice field towards some deciduous forest that lay on the other side. Some of the fruit seemed to rise as they flew. In the deciduous forest there were no trees of either takien or yang. The next morning some fruit of both the *Dipterocarpus* and the *Hopea* were found within the border of the deciduous forest. The furthest found had travelled about 270 metres (300 yards). This is considerably further than the distance given in 'The Dispersal of Plants throughout the World,' by Ridley. That author there states "I have seen these *Dipterocarps* in fruit during as violent a wind storm as we have ever known, and even then the fruit did not fly 100 yards."

Fruit of *Pterocarpus* sp. (pradu). In Muang Lôi Province there is a flat-topped mountain, Kao Krading, about 1,200 metres (4,000 feet) in height. When walking over this plateau, which is open and grassy, I twice came across the fruit of a *Pterocarpus* lying on the ground. No trees of *Pterocarpus* were seen on the plateau, or in fact anywhere on the mountain above an altitude of 900 metres. The probability is, therefore, that these fruit had been carried up at least 300 metres (1,000 feet), as well as some way over the plateau. No doubt the forest fires at that time of the year, February, often caused strong upward currents of heated air,

A. KERR.

Bangkok, May 29th, 1931.

No. V. Habitat of Schomburgk's Deer.

In a note in the Journal of the Natural History Society of Siam, Vol. IV, p. 105, Mr. Boden Kloss draws attention to a reference by Major Seidenfaden, in the Journal of the Siam Society, Vol. XIII, Part 3, pp. 49, 50, to Schomburgk's deer. There Major Seidenfaden, in speaking of the *Kha Dong Luang* inhabiting the jungle on the